

**Advanced Ultrasound Technologies for Early Diagnosis of Osteoporosis.
CNR - Echolight Ultrasound Spinal Densitometry**

The system is a revolutionary ultrasound technology which provides superior accuracy, prediction of fractures, and high sensitivity to changes in bone, caused by treatment and metabolic diseases. It is the only ultrasound device providing osteoporosis diagnosis at the vertebral site, and bone strength assessment.

**RAI 1 - Italian television
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Theme: Osteoporosis**

Guests:

- Prof. Maria Teresa Brandi, Professor of Endocrinology, Director of Metabolic Bone Diseases and Disorders of Mineral Metabolism at University Hospital Careggi - Florence (one of the main expert in the world for Osteoporosis diseases)
- Dr. Marco Farini, Director of Oncology at University Hospital Careggi - Florence

In the video is shown a new Ultrasound Technology for diagnosis of Osteoporosis on vertebral bones and femur.

Prof. Maria Teresa Brandi says:

"This is an Italian invention: a invention of the National Council of Researches (CNR) in collaboration with the Hospital of Lecce and the Institute of Physiology of the University of Lecce.

They have developed a new method for the diagnosis of osteoporosis, to assess the amount of bone that has been lost at the two fundamental sites that are vertebrae and femur.

This equipment is important because it uses ultrasound technique.

When we measure the bone mass at a site, we assess the risk of fracture at that site. Till now we had at our disposal methods that uses ultrasound at phalanx and calcaneus sites, sites where you do not commonly have fractures.

This new CNR equipment is able to use ultrasound to measure bone density in the two most important sites for the fracture: at vertebral site and the femoral site, something that until now was not possible.

This allows us to better correlate the risk of fracture to the measurement we make.

Such results are absolutely important.

This Ultrasound technique does not expose to radiation and can be used by many operators.

I consider this a great Italian invention."

In this project was used Telemed "Echo Blaster 128 CEXT-1Z" equipment.